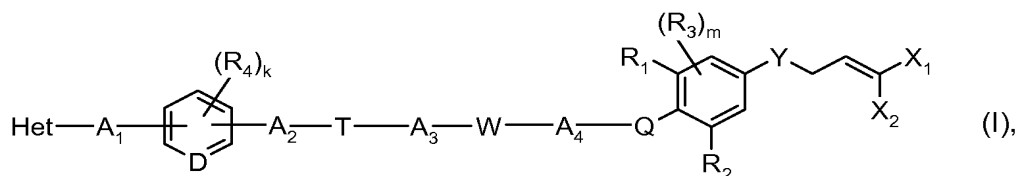


What is claimed is:

## 1. A compound of formula



wherein

Het is non-aromatic heterocyclyl that does not contain cumulative double bonds and that has 5 or 6 ring members of which the linking ring member, by way of which Het is linked, by means of a first single bond, to the remainder of the compound of formula I, is either a nitrogen atom that carries two further single bonds which lead to the two ring members of Het directly adjacent to that nitrogen atom, or a carbon atom that carries a further single bond and a double bond which lead to the two ring members of Het directly adjacent to that carbon atom, and the remaining 4 or 5 ring members of Het are, independently of one another, selected from the group consisting of the ring members -C(R<sub>i</sub>)(R<sub>ii</sub>)-, -C(=O)-, -C(=S)-, -O-, -S-, -N(R<sub>iii</sub>)-, -C(R<sub>iv</sub>)= and -N=, wherein (A) of the 5 or 6 ring members of Het, from 1 up to and including 4 ring members, independently of one another, each contributes a hetero atom to the basic ring structure of Het consisting of 5 or 6 ring atoms, (B) two directly adjacent ring members of Het are not both -O-, and (C), when the mentioned linking ring member of Het is a nitrogen atom, either (i) at least one ring member of the mentioned remaining 4 or 5 ring members of Het is -N= or (ii) at least one of the 2 or 3 ring members of Het that are neither the mentioned linking ring member of Het nor its two directly adjacent ring members is -C(=O)- or -C(=S)- or (iii) at least three ring members of the mentioned remaining 4 or 5 ring members of Het are each independently of the others -C(R<sub>iv</sub>)= or (iv) at least two ring members of the mentioned remaining 4 or 5 ring members of Het are each independently of the other(s) -O-, -S- or -N(R<sub>iii</sub>)- and, when the mentioned linking ring member of Het is a carbon atom, either (v) the mentioned double bond starting from that carbon atom leads to a nitrogen atom or (vi) the ring member of Het bonded to the mentioned further single bond starting from that carbon atom is -C(=O)- or -C(=S)-;

R<sub>i</sub> and R<sub>ii</sub> are each independently of the other hydrogen, halogen, C<sub>1</sub>-C<sub>6</sub>alkyl, halo-C<sub>1</sub>-C<sub>6</sub>alkyl, C<sub>1</sub>-C<sub>6</sub>alkoxy, halo-C<sub>1</sub>-C<sub>6</sub>alkoxy, C<sub>2</sub>-C<sub>6</sub>alkenyl, C<sub>2</sub>-C<sub>6</sub>alkynyl or C<sub>1</sub>-C<sub>6</sub>alkoxy-C<sub>1</sub>-C<sub>6</sub>alkyl;

R<sub>iii</sub> is C<sub>1</sub>-C<sub>6</sub>alkyl, halo-C<sub>1</sub>-C<sub>6</sub>alkyl, C<sub>1</sub>-C<sub>6</sub>alkoxy, halo-C<sub>1</sub>-C<sub>6</sub>alkoxy, C<sub>2</sub>-C<sub>6</sub>alkenyl, C<sub>2</sub>-C<sub>6</sub>alkynyl or C<sub>1</sub>-C<sub>6</sub>alkoxy-C<sub>1</sub>-C<sub>6</sub>alkyl;

R<sub>iv</sub> is hydrogen, halogen, C<sub>1</sub>-C<sub>6</sub>alkyl, halo-C<sub>1</sub>-C<sub>6</sub>alkyl, C<sub>1</sub>-C<sub>6</sub>alkoxy, halo-C<sub>1</sub>-C<sub>6</sub>alkoxy, C<sub>2</sub>-C<sub>6</sub>alkenyl, C<sub>2</sub>-C<sub>6</sub>alkynyl or C<sub>1</sub>-C<sub>6</sub>alkoxy-C<sub>1</sub>-C<sub>6</sub>alkyl;

A<sub>1</sub>, A<sub>2</sub> and A<sub>3</sub> are each independently of the others a bond or a C<sub>1</sub>-C<sub>6</sub>alkylene bridge which is unsubstituted or substituted from one to six times by, each independently of the other(s), C<sub>3</sub>-C<sub>8</sub>cycloalkyl, C<sub>3</sub>-C<sub>8</sub>cycloalkyl-C<sub>1</sub>-C<sub>6</sub>alkyl or halo-C<sub>1</sub>-C<sub>3</sub>alkyl;

A<sub>4</sub> is a C<sub>1</sub>-C<sub>6</sub>alkylene bridge which is unsubstituted or substituted from one to six times by, each independently of the other(s), C<sub>3</sub>-C<sub>8</sub>cycloalkyl, C<sub>3</sub>-C<sub>8</sub>cycloalkyl-C<sub>1</sub>-C<sub>6</sub>alkyl or halo-C<sub>1</sub>-C<sub>3</sub>alkyl;

D is CH or N;

W is O, NR<sub>5</sub>, S, S(=O), S(=O)<sub>2</sub>, -C(=O)-O-, -O-C(=O)-, -C(=O)-NR<sub>6</sub>- or -NR<sub>6</sub>-C(=O)-;

T is a bond, O, NH, NR<sub>5</sub>, S, S(=O), S(=O)<sub>2</sub>, -C(=O)-O-, -O-C(=O)-, -C(=O)-NR<sub>6</sub>- or -NR<sub>6</sub>-C(=O)-;

Q is O, NR<sub>5</sub>, S, S(=O) or S(=O)<sub>2</sub>;

Y is O, NR<sub>5</sub>, S, S(=O) or S(=O)<sub>2</sub>;

X<sub>1</sub> and X<sub>2</sub> are each independently of the other fluorine, chlorine or bromine;

R<sub>1</sub> and R<sub>2</sub> are each independently of the other H, halogen, CN, nitro, C<sub>1</sub>-C<sub>6</sub>alkyl, halo-C<sub>1</sub>-C<sub>6</sub>alkyl, C<sub>1</sub>-C<sub>6</sub>alkylcarbonyl, C<sub>2</sub>-C<sub>6</sub>alkenyl, halo-C<sub>2</sub>-C<sub>6</sub>alkenyl, C<sub>2</sub>-C<sub>6</sub>alkynyl, C<sub>1</sub>-C<sub>6</sub>alkoxy, halo-C<sub>1</sub>-C<sub>6</sub>alkoxy, C<sub>2</sub>-C<sub>6</sub>alkenyloxy, halo-C<sub>2</sub>-C<sub>6</sub>alkenyloxy, C<sub>3</sub>-C<sub>6</sub>alkynyloxy, C<sub>1</sub>-C<sub>6</sub>alkoxycarbonyl or halo-C<sub>3</sub>-C<sub>6</sub>alkynyloxy;

R<sub>3</sub> is halogen, CN, nitro, C<sub>1</sub>-C<sub>6</sub>alkyl, halo-C<sub>1</sub>-C<sub>6</sub>alkyl, C<sub>1</sub>-C<sub>6</sub>alkylcarbonyl, C<sub>2</sub>-C<sub>6</sub>alkenyl, halo-C<sub>2</sub>-C<sub>6</sub>alkenyl, C<sub>2</sub>-C<sub>6</sub>alkynyl, C<sub>1</sub>-C<sub>6</sub>alkoxy, halo-C<sub>1</sub>-C<sub>6</sub>alkoxy, C<sub>2</sub>-C<sub>6</sub>alkenyloxy, halo-C<sub>2</sub>-C<sub>6</sub>alkenyloxy, C<sub>3</sub>-C<sub>6</sub>alkynyloxy, C<sub>1</sub>-C<sub>6</sub>alkoxycarbonyl or halo-C<sub>3</sub>-C<sub>6</sub>alkynyloxy, the two R<sub>3</sub> substituents being identical or different when m is 2;

R<sub>4</sub> is halogen, CN, nitro, C<sub>1</sub>-C<sub>6</sub>alkyl, halo-C<sub>1</sub>-C<sub>6</sub>alkyl, C<sub>1</sub>-C<sub>6</sub>alkylcarbonyl, C<sub>2</sub>-C<sub>6</sub>alkenyl, halo-C<sub>2</sub>-C<sub>6</sub>alkenyl, C<sub>2</sub>-C<sub>6</sub>alkynyl, C<sub>1</sub>-C<sub>6</sub>alkoxy, halo-C<sub>1</sub>-C<sub>6</sub>alkoxy, C<sub>2</sub>-C<sub>6</sub>alkenyloxy, halo-C<sub>2</sub>-C<sub>6</sub>alkenyloxy, C<sub>3</sub>-C<sub>6</sub>alkynyloxy, C<sub>1</sub>-C<sub>6</sub>alkoxycarbonyl or halo-C<sub>3</sub>-C<sub>6</sub>alkynyloxy, the R<sub>4</sub> substituents being identical or different when k is greater than 1;

R<sub>5</sub> is H, C<sub>1</sub>-C<sub>6</sub>alkyl, halo-C<sub>1</sub>-C<sub>3</sub>alkyl, halo-C<sub>1</sub>-C<sub>3</sub>alkylcarbonyl, C<sub>1</sub>-C<sub>6</sub>alkoxyalkyl, C<sub>1</sub>-C<sub>6</sub>alkylcarbonyl or C<sub>3</sub>-C<sub>8</sub>cycloalkyl;

R<sub>6</sub> is H, C<sub>1</sub>-C<sub>6</sub>alkyl, halo-C<sub>1</sub>-C<sub>3</sub>alkyl, halo-C<sub>1</sub>-C<sub>3</sub>alkylcarbonyl, C<sub>1</sub>-C<sub>6</sub>alkoxyalkyl, C<sub>1</sub>-C<sub>6</sub>alkylcarbonyl or C<sub>3</sub>-C<sub>8</sub>cycloalkyl;

k is 0, 1, 2 or 3 when D is N or is 0, 1, 2, 3 or 4 when D is CH; and

m is 0, 1 or 2,

and, where applicable, possible E/Z isomers, mixtures of E/Z isomers and/or tautomers thereof, in each case in free form or in salt form.

2. A compound according to claim 1 in free form.

3. A compound according to any one of claims 1 to 2, wherein X<sub>1</sub> and X<sub>2</sub> are chlorine or bromine.

4. A compound according to any one of claims 1 to 3 wherein A<sub>1</sub> is a bond.

5. A compound according to any one of claims 1 to 4 wherein the group A<sub>2</sub>-T-A<sub>3</sub> is a bond.

6. A compound according to any one of claims 1 to 5 wherein W is O, -C(=O)O- or -C(=O)NH-.

7. A compound according to any one of claims 1 to 6 wherein A<sub>4</sub> is a straight-chain alkylene bridge.

8. A compound according to any one of claims 1 to 7 wherein Q is oxygen.

9. A compound according to any one of claims 1 to 8 wherein Y is oxygen.

10. A compound according to any one of claims 1 to 9 wherein R<sub>1</sub> and R<sub>2</sub> are bromine or chlorine.

11. A compound according any one of claims 1 to 10 wherein m is 0.

12. A compound according to any one of claims 1 to 11 wherein R<sub>4</sub> is halogen and k is 2 or 0.

13. A compound according to any one of claims 1 to 12 wherein D is CH.

14. A pesticidal composition comprising as active ingredient at least one compound according to any one of claims 1 to 13, in free form or in agrochemically usable salt form, and at least one adjuvant.

15. A process for the preparation of a composition as described in claim 14, which comprises intimately mixing the active ingredient with the adjuvants.

16. A method of controlling pests, which comprises applying a composition as described in claim 14 to the pests or to the locus thereof.